

WHAT IS CLAIMED IS:

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- Sub A.*
1. A method of reporting a system failure in a server system, comprising:
detecting a system failure condition;
transmitting failure information related to the failure condition;
storing the failure information; and
reporting an occurrence of an event.

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2. The method of Claim 1 wherein:
the act of transmitting the failure information comprises transmitting the failure information to a system recorder;
the act of storing the failure information comprises storing the failure information in a system log; and
the act of reporting an occurrence of an event comprises reporting the ~~occurrence of the event to a central processing unit of the server system.~~

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3. The method of Claim 2 further comprising notifying an operator of the system failure.

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4. The method of Claim 3 wherein the act of notifying an operator comprises displaying a message on a monitor coupled to the central processing unit.

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5. The method of Claim 3 further comprising accessing the system log to read the failure information from the system log.

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6. The method of Claim 2 further comprising determining when the failure condition occurred and storing a representation of when the failure condition occurred in the system log.

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7. The method of Claim 2 wherein the act of reporting the occurrence of the event to the central processing unit comprises:

sending an event signal to a system interface, coupled to the central processing unit;

setting a bit in a bit vector within the system interface, wherein the setting of the bit corresponds to a specified type of system failure; and

5 sending an interrupt signal to the central processing unit after the bit is set, wherein, upon receiving the interrupt signal the central processing unit reads a status register within the system interface to ascertain that the event signal has been received by the system interface.

10 ~~7~~⁶. The method of Claim ~~2~~⁷ further comprising reading the bit vector to ascertain a type of event.

15 ~~8~~⁸. The method of Claim 2 wherein the act of reporting the occurrence of the event to the central processing unit comprises:

sending an event signal to a system interface, coupled to the central processing unit;

setting a bit in a bit vector within the system interface, wherein the setting of the bit corresponds to a specified type of system failure; and

20 setting a status of a status register within the system interface to indicate the occurrence of the event, wherein the central processing unit monitors the status register within the system interface at specified periodic intervals.

25 ~~10~~⁹. The method of Claim ~~9~~¹⁰ further comprising reading the bit vector to ascertain a type of event.

~~11~~¹⁰. The method of Claim 2 further comprising reporting the occurrence of the event to a local computer connected to server system via a remote interface.

30 ~~12~~¹¹. The method of Claim ~~11~~¹⁰ wherein the act of reporting the occurrence of the event to the local computer comprises:

1. sending an event signal to the remote interface;
2. setting a bit in a bit vector within the remote interface, wherein the setting of the bit corresponds to a specified type of system failure; and
3. notifying the local computer that the event signal has been received by the remote interface.

12. The method of Claim 11 wherein the act of notifying the local computer comprises transmitting a ready-to-read signal to the local computer, wherein, upon receiving the ready-to-read signal, the local computer interrogates the remote interface to ascertain that the bit in the bit vector has been set.

13. The method of Claim 12 further comprising notifying a local operator, who is using the local computer, of the system failure.

14. The method of Claim 13 wherein the act of notifying the local operator comprises displaying a message on a monitor coupled to the local computer.

15. The method of Claim 14 further comprising accessing the system log through the local computer to read the failure information.

16. The method of Claim 15 further comprising reporting the occurrence of the event to a remote computer connected to the server system via a remote interface, wherein the remote computer is connected to the remote interface via a modem-to-modem connection.

17. The method of Claim 16 wherein the act of reporting the occurrence of the event to the remote computer comprises:

18. sending an event signal to the remote interface;
19. setting a bit in a bit vector within the remote interface, wherein the setting of the bit corresponds to a specified type of system failure; and

notifying the remote computer that the event signal has been received by the remote interface.

5 18. The method of Claim 18 wherein the act of notifying the remote computer comprises:

automatically calling a phone number corresponding to a modem coupled to the remote computer, wherein, upon receiving the call, the remote computer interrogates the remote interface to ascertain that the bit in the bit vector has been set.

10 19. The method of Claim 19 further comprising:

verifying that the remote computer is authorized to access the server system via the remote interface; and

15 verifying that a communication link has been established between the remote computer and the remote interface.

20 21. The method of Claim 19 further comprising notifying a remote operator, who is using the remote computer, of the system failure.

21. The method of Claim 21 wherein the act of notifying the remote operator comprises displaying a message on a monitor coupled to the remote computer.

25 22. The method of Claim 21 further comprising accessing the system log through the remote computer to read the failure information.

23. A method of reporting a system failure in a server system, comprising:
detecting a system failure condition;
transmitting failure information related to the failure condition to a functional system recorder; *on independently*
assigning a time value to the failure information;

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storing the failure information and its time value in a system log;

✓ reporting an occurrence of an event to a central processing unit coupled to the server system; and

communicating failure information from the system log to an operator.

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25. The method of Claim *24* wherein the act of reporting the occurrence of the event comprises:

sending an event signal to a system interface, coupled to the central processing unit;

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setting a bit in a bit vector within the system interface, wherein the setting of the bit corresponds to a specified type of system failure; and

sending an interrupt signal to the central processing unit after the bit is set, wherein, upon receiving the interrupt signal the central processing unit reads a status register within the system interface to ascertain that the event signal has been received by the system interface.

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24. The method of Claim *25* further comprising reading the bit vector.

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24. The method of Claim *24* wherein the act of reporting the occurrence of the event to the central processing unit comprises:

sending an event signal to a system interface, coupled to the central processing unit;

setting a bit in a bit vector within the system interface, wherein the setting of the bit corresponds to a specified type of system failure; and

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setting a status of a status register within the system interface to indicate the occurrence of the event, wherein the central processing unit monitors the status register within the system interface at specified periodic intervals.

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26. The method of Claim *27* further comprising reading the bit vector.

28 *30.* The method of Claim *24* wherein the specified type of failure is selected from a group consisting of: a central processing unit failure, a power supply failure, a fan failure, a canister failure, and a temperature failure.

5 *Sub C'* *30.* A method of reporting a system failure in a server system, comprising:
detecting a system failure condition;
transmitting failure information related to the failure condition to a
system recorder;

10 assigning a time value to the failure information;
storing the failure information and its time value in a system log;
reporting an occurrence of an event to a local computer coupled to the
server system via a remote interface; and
~~communicating failure information from the system log to an operator.~~

15 *30.* The method *of* *Claim 30* wherein the act of reporting the occurrence
of the event to the local computer comprises:

20 sending an event signal to the remote interface;
setting a bit in a bit vector within the remote interface, wherein the
setting of the bit corresponds to a specified type of system failure; and

notifying the local computer that the event signal has been received by
the remote interface.

25 *31.* The method of Claim *31* wherein the act of notifying the local computer
comprises transmitting a ready-to-read signal to the local computer, wherein, upon
receiving the ready-to-read signal, the local computer interrogates the remote interface
to ascertain that the bit in the bit vector has been set.

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32. The method of Claim *32* further comprising notifying a local operator,
who is using the local computer, of the system failure.

33 34. The method of Claim *33* wherein the act of notifying the local operator comprises displaying a message on a monitor coupled to the local computer.

5 *Sub C 2* 35. A method of reporting a system failure in a server system, comprising:
detecting a system failure condition;
transmitting failure information related to the failure condition to a
system recorder;
assigning a time value to the failure information;
storing the failure information and its time value in a system log;
10 reporting an occurrence of an event to a remote computer coupled to the
server system via a remote interface, wherein the remote computer is connected
to the remote interface via a modem connection; and
~~communicating failure information from the system log to an operator.~~

15 36. The method of Claim *35* wherein the act of reporting the occurrence of
the event to the remote computer comprises:
sending an event signal to the remote interface;
setting a bit in a bit vector within the remote interface, wherein the
setting of the bit corresponds to a specified type of system failure; and
20 notifying the remote computer that the event signal has been received
by the remote interface.

37. The method of Claim *36* wherein the act of notifying the remote
computer comprises:

25 automatically calling a phone number corresponding to a modem
coupled to the remote computer, wherein, upon receiving the call, the remote
computer interrogates the remote interface to ascertain that the bit in the bit
vector has been set.

30 38. The method of Claim *37* further comprising:

verifying that the remote computer is authorized to access the server system via the remote interface; and

verifying that a communication link has been established between the remote computer and the remote interface.

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39. The method of Claim *38* further comprising notifying a remote operator, who is using the remote computer, of the system failure.

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40. The method of Claim *39* wherein the act of notifying the remote operator comprises displaying a message on a monitor coupled to the remote computer.

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41. A method of reporting a system failure in a server system, comprising: detecting a system failure condition;

transmitting failure information related to the failure condition to a system recorder;

storing the failure information in a system log; and

executing a central processing unit operation in response to detecting a system failure condition.

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42. The method of Claim *41* wherein the ^{central} processing unit operation comprises notifying an operator of the system failure.

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43. The method of Claim *42* wherein the act of notifying an operator comprises displaying a message on a monitor coupled to the central processing unit.

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44. The method of Claim 41 wherein the central processing unit operation comprises accessing the system log to read the failure information stored therein.